King County CSI Project

Juanita Bay Pump Station - Construction Cost Estimate for Alternative 4A

Upgrade Existing Pump Station with New Generator and Chemical Control Facility

| opgrade Existing Fullip Station with New Ot | | | | • |
|--|-------|-----------------|----------|------------------|
| District 0 | Units | Cost / Unit | Quantity | Estimated Cost |
| Division 2 | | # 00 000 | , | # 00.000 |
| Earthwork | LS | \$20,000 | 1 | \$20,000 |
| Landscaping and Irrigation | LS | \$15,000 | 1 | \$15,000 |
| Soil Erosion and Sediment Control | LS | \$4,000 | 1 | \$4,000 |
| Division 3 | | | | |
| Concrete: Slabs on Grade | CY | \$300 | 60 | \$18,000 |
| Division 6 | | | | |
| RTP Grating | SF | \$40 | 250 | \$10,000 |
| Division 9 | | | | |
| Painting and Protective Coatings | LS | \$15,000 | 1 | \$15,000 |
| Division 10 | | | | |
| Louvers and Vents | LS | \$18,000 | 1 | \$18,000 |
| Identification, Stenciling, and Tagging Systems | LS | \$1,000 | 1 | \$1,000 |
| Signage | LS | \$1,000 | 1 | \$1,000 |
| Fire System | LS | \$5,000 | 1 | \$5,000 |
| Division 11 | | | | |
| Equipment: Non-Clog Centrifugal - 300 HP | EA | \$70,000 | 4 | \$280,000 |
| Engine Generators: Diesel - 1200 kW | EA | \$120,000 | 1 | \$120,000 |
| Fuel Tank and ATGS | LS | \$18,000 | 1 | \$18,000 |
| Seal Water System | LS | \$20,000 | 1 | \$20,000 |
| Chemical Metering Pump and Appurtenances | EA | \$9,500 | 2 | \$19,000 |
| Chemical Storage Tanks | EA | \$13,500 | 1 | \$13,500 |
| Division 13 | | | | |
| Noise Attenuation Panels | SF | \$25 | 1,000 | \$25,000 |
| Noise Attenuators and Silencers | EA | \$8,000 | 4 | \$32,000 |
| Division 15 | | | | |
| Mechanical Cooling System for VFDs | LS | \$15,000 | 1 | \$15,000 |
| Seal Water System | LS | \$12,000 | 1 | \$12,000 |
| C1 Water System | LS | \$3,000 | 1 | \$3,000 |
| Float Switch Assembly - High Level Controls | LS | \$5,500 | 1 | \$5,500 |
| Float Switch Assembly - Low Level Switch | LS | \$4,000 | 1 | \$4,000 |
| Surge Control and Air Release Valving | LS | \$35,000 | 1 | \$35,000 |
| Wetwell HVAC Equipment | LS | \$15,000 | 1 | \$15,000 |
| Miscellaneous | | * -, | | + -, |
| Superstructure: Roof, lighting, duct, finishes, etc. | SF | \$250 | 1,600 | \$400,000 |
| Division 16 & 17 | - | | 1,000 | ¥ 100,000 |
| VFDs - 300 HP | EA | \$60,000 | 4 | \$240,000 |
| AutomaticTransfer Switch for Generator | EA | \$40,000 | 1 | \$40,000 |
| Transformer | EA | \$30,000 | 1 | \$30,000 |
| Concrete Encasement for Conduit | LS | \$6,000 | 1 | \$6,000 |
| Allowance for Controls | LS | \$50,000 | 1 | \$50,000 |
| Miscellaneous Conduit and Cable | LS | \$40,000 | 1 | \$40,000 |
| SUBTOTAL | | ψ-τυ,υυυ | 1 | |
| | 200/ | | | \$1,530,000 |
| Contingency @ | 30% |) | = | \$459,000 |
| SUBTOTAL | | | | \$1,989,000 |
| | | | | |

| Mobilization @ | 5.0% | | | \$99,000 |
|------------------------------------|------|------|--------|-------------|
| General Conditions @ | 8.8% | | | \$175,000 |
| Bonds and Insurance @ | 3.0% | | _ | \$60,000 |
| SUBTOTAL | | | | \$2,323,000 |
| Overhead and Profit @ | 8.5% | | _ | \$197,000 |
| Estimated Direct Construction Cost | | | | \$2,520,000 |
| Sales Tax @ | 8.6% | | | \$217,000 |
| Total Estimated Construction Cost | | | | \$2,737,000 |
| Allied Costs | 35% | | | \$958,000 |
| Easements | SF | \$5 | 1,000 | \$5,000 |
| Land Acquisition | SF | \$25 | 25,000 | \$625,000 |
| Total Estimated Project Cost | | | | \$4,325,000 |

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King County CSI Project
Juanita Bay Pump Station - Construction Cost Estimate for Alternative 4B
Upgrade Existing Pump Station with New Generator and Chemical Control Facility

| opgrade Existing Famp Station War New St | Units | Cost / Unit | | Estimated Cost |
|--|-------|-------------|-------|----------------|
| Division 2 | | | • | |
| Earthwork | LS | \$20,000 | 1 | \$20,000 |
| Landscaping and Irrigation | LS | \$15,000 | 1 | \$15,000 |
| Soil Erosion and Sediment Control | LS | \$4,000 | 1 | \$4,000 |
| Division 3 | | . , | | . , |
| Concrete: Slabs on Grade | CY | \$300 | 60 | \$18,000 |
| Division 6 | | · | | . , |
| RTP Grating | SF | \$40 | 250 | \$10,000 |
| Division 9 | | • | | . , |
| Painting and Protective Coatings | LS | \$15,000 | 1 | \$15,000 |
| Division 10 | | | | |
| Louvers and Vents | LS | \$20,000 | 1 | \$20,000 |
| Identification, Stenciling, and Tagging Systems | LS | \$1,000 | 1 | \$1,000 |
| Signage | LS | \$1,000 | 1 | \$1,000 |
| Fire System | LS | \$5,000 | 1 | \$5,000 |
| Division 11 | | | | |
| Equipment: Non-Clog Centrifugal - 400 HP | EA | \$95,000 | 4 | \$380,000 |
| Engine Generators: Diesel - 1500 kW | EA | \$125,000 | 1 | \$125,000 |
| Fuel Tank and ATGS | LS | \$18,000 | 1 | \$18,000 |
| Seal Water System | LS | \$20,000 | 1 | \$20,000 |
| Chemical Metering Pump and Appurtenances | EA | \$9,500 | 2 | \$19,000 |
| Chemical Storage Tanks | EA | \$13,500 | 1 | \$13,500 |
| Division 13 | | | | |
| Noise Attenuation Panels | SF | \$25 | 1,000 | \$25,000 |
| Noise Attenuators and Silencers | EA | \$9,000 | 4 | \$36,000 |
| Division 15 | | | | |
| 18" Discharge Header | LF | \$30 | 180 | \$5,400 |
| 18" Pipe Fittings | EA | \$1,200 | 7 | \$8,400 |
| 18" Discharge Header - Supports, connect, etc | LS | \$10,000 | 1 | \$10,000 |
| Mechanical Cooling System for VFDs | LS | \$15,000 | 1 | \$15,000 |
| Seal Water System | LS | \$12,000 | 1 | \$12,000 |
| C1 Water System | LS | \$3,000 | 1 | \$3,000 |
| Float Switch Assembly - High Level Controls | LS | \$5,500 | 1 | \$5,500 |
| Float Switch Assembly - Low Level Switch | LS | \$4,000 | 1 | \$4,000 |
| Surge Control and Air Release Valving | LS | \$35,000 | 1 | \$35,000 |
| Wetwell HVAC Equipment | LS | \$15,000 | 1 | \$15,000 |
| Miscellaneous | | | | |
| Superstructure: Roof, lighting, duct, finishes, etc. | SF | \$250 | 1,800 | \$450,000 |
| Division 16 & 17 | | | | |
| VFDs - 400 HP | EA | \$80,000 | 4 | \$320,000 |
| AutomaticTransfer Switch for Generator | EA | \$40,000 | 1 | \$40,000 |
| Transformer | EA | \$30,000 | 1 | \$30,000 |
| Concrete Encasement for Conduit | LS | \$6,000 | 1 | \$6,000 |
| Allowance for Controls | LS | \$50,000 | 1 | \$50,000 |
| Miscellaneous Conduit and Cable | LS | \$40,000 | 1 | \$40,000 |
| SUBTOTAL | | | | \$1,794,800 |

| Contingency @ | 30% | | _ | \$538,000 |
|------------------------------------|------|------|----------|-------------|
| SUBTOTAL | | | _ | \$2,332,800 |
| Mobilization @ | 5.0% | | | \$117,000 |
| General Conditions @ | 8.8% | | | \$205,000 |
| Bonds and Insurance @ | 3.0% | | _ | \$70,000 |
| SUBTOTAL | | | | \$2,725,000 |
| Overhead and Profit @ | 8.5% | | _ | \$232,000 |
| Estimated Direct Construction Cost | | | | \$2,957,000 |
| Sales Tax @ | 8.6% | | | \$254,000 |
| Total Estimated Construction Cost | | | | \$3,211,000 |
| Allied Costs | 35% | | | \$1,124,000 |
| Easements | SF | \$5 | 1,000 | \$5,000 |
| Land Acquisition | SF | \$25 | 25,000 _ | \$625,000 |
| Total Estimated Project Cost | | | | \$4,965,000 |

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